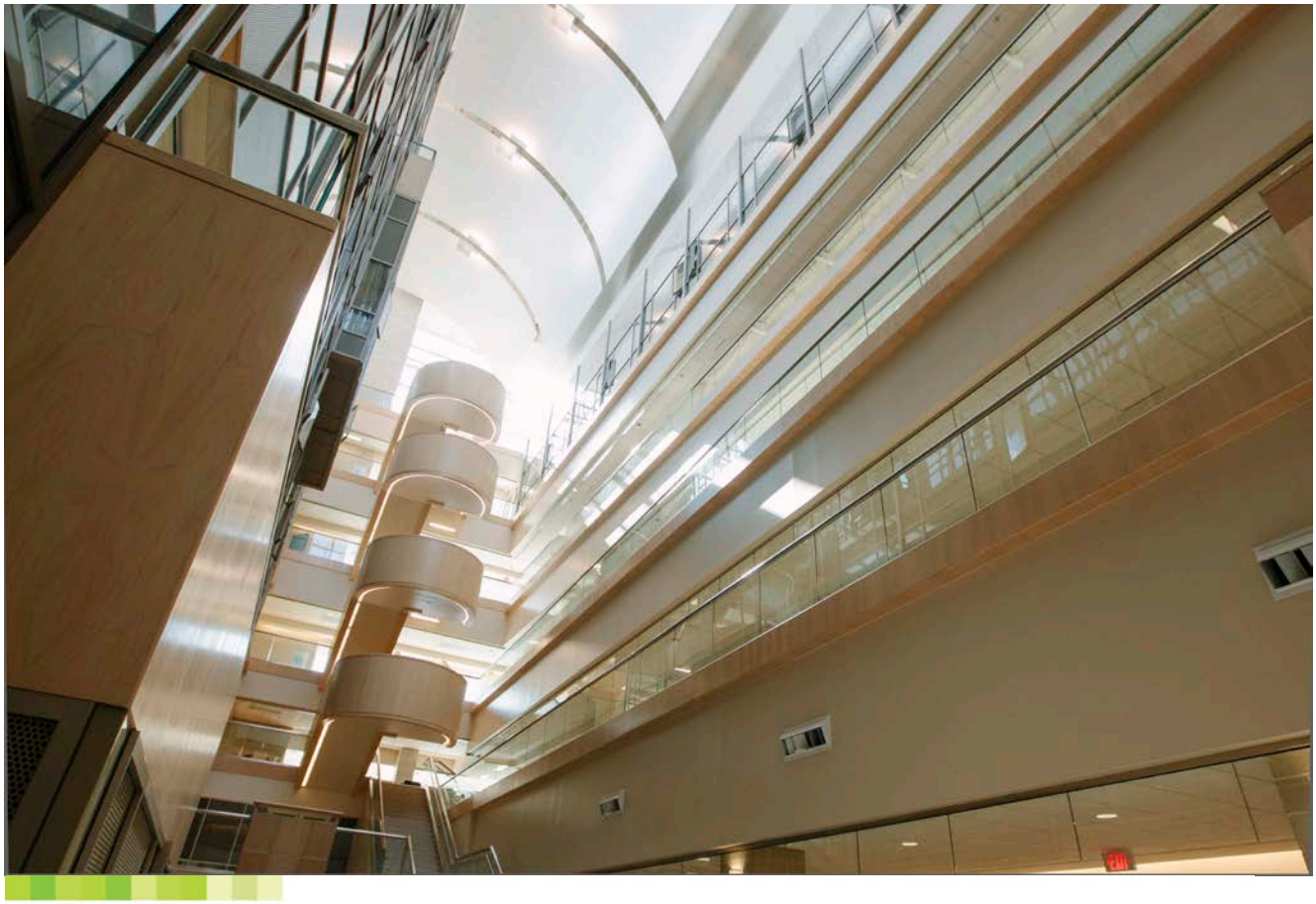

UNIVERSITY OF SASKATCHEWAN
College of Medicine
DIVISION OF SOCIAL ACCOUNTABILITY
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Pressing Health Needs Rooted in Social Issues for Curriculum Planning and Delivery

2017

Drafted November 2017 by the Division of Social Accountability, College of Medicine

Executive Summary

At the request of the College of Medicine (CoM) Curriculum Committee, the Division of Social Accountability annually produces the report *Pressing Health Needs Rooted in Social Issues for Curriculum Planning and Delivery* to help ensure medical curriculum includes instruction on the diagnosis, prevention, appropriate reporting and treatment of the medical consequences of common societal problems (CACMS element # 7.5 *Societal Problems*). Centering medical school programming and curriculum content on pressing social issues that have health implications enable the CoM graduates to respond directly to the health needs of the communities they serve.

The inaugural report was produced in October 2016 and highlighted three issues of particular concern for Saskatchewan: 1) Indigenous health inequities, 2) poverty, and 3) mental health, stigma and suicide risk. A document review to identify local, regional and national priorities corroborated the focus on these three issues. The 2016 report provided a brief overview of the current status of inequity in each area and the impact on health as well as detail on commitments to address these inequities from government and non-governmental organizations at the local, provincial and national levels, and considerations for the integration of training on these issues into medical curriculum.

The 2017 report expands on the 2016 version with updated statistics, current status on inequity and further renewed commitment in each area, where they exist. Further, a small group of key stakeholders were consulted by the division to validate the information in the 2016 report, and identify additional background sources of data as well as curriculum planning tools. Further detail is provided in the 2017 report on recommendations for training health care providers and, where they exist, competencies/objectives for medical practitioners are outlined. The 2017 report also includes an extensive resource list to support medical training in each of the three areas. Lastly, social issues beyond the three identified in 2016 that warrant further consideration for medical curriculum programming are also included.

Acknowledgements

The division would like to extend a thank-you to Dr. Alexandra King, Cameco Chair in Indigenous Health, University of Saskatchewan; Lara Murphy, Manager Public Health Observatory, Saskatoon Health Region; and Josh Marko, Epidemiologist Public Health Observatory, Saskatoon Health Region for their review and feedback on a draft version of this report.

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Indigenous Health – The Historical Root of Current Day Inequities

Globally, Indigenous populations face poorer overall health outcomes and continue to experience inequities across most health indicators when compared to other populations[2]. In Canada, Indigenous communities are more likely to experience poor health outcomes in essentially every indicator possible[2]: infant and young child mortality; maternal morbidity and mortality; infectious disease; malnutrition and stunted growth; shortened life expectancy; HIV/AIDS; tuberculosis; obesity and Type 2 diabetes; hypertension, cardiovascular disease; disability; accidents; interpersonal violence, homicide and suicide; mental health issues; and diseases caused by environmental contamination[3]. Historically Saskatchewan has shown some of the most extreme health outcome inequities when comparing Indigenous with non-Indigenous populations[4]. As the Indigenous population continues to grow at a faster rate (expecting to increase to 32.4% in Saskatchewan by 2045[3]) the health status of Indigenous peoples continues to be an important focus for researchers, healthcare professionals and policy makers.

The root of this inequity is incredibly complex, lying in the historical and on-going political, economic, social and cultural marginalization of Indigenous communities and sitting largely outside the typically constituted domain of health[3]. Beyond the healthcare-specific barriers of access to preventative, urgent and emergent care that is culturally resonant, Indigenous people experience inequities in the conditions that determine health: poverty, poor physical environment, fewer employment opportunities, weaker community infrastructure, etc[5]. The history of Indigenous peoples in Canada is one of colonization and neo-colonialism and has had intergenerational effects: all Indigenous groups have suffered losses of land, language, self-determination, identity and culture and have shared experiences of racism, discrimination and social exclusion – much of which is ongoing today.

Indigenous Health Inequities – Commitment at Local, Provincial and National Level

Commitment to reducing these inequities exists at the local, provincial and national levels by government, research and health professional organizations, among others. Provincially within Saskatchewan, in 2008 the Government of Saskatchewan (together with the Government of Canada and the Federation of Sovereign Indigenous Nations) signed a memorandum of understanding (MOU) to improve the health and wellness of Indigenous peoples, eliminate inequity, and develop a *10-Year Indigenous Health and Wellness Plan*[6]. The Saskatoon Regional Health Authority and the Aboriginal Health Council followed with an MOU of the Aboriginal Health Council in 2010, with the goal of closing the gaps between the Indigenous population and non-Indigenous populations by improving health outcomes and experiences of care for Indigenous peoples and promoting the integration of culturally resonant health services[7]. At the national level, organizations dedicated to improving the health outcomes and health equity of Indigenous peoples have been established by the Canadian government, including the National Collaborating Centre for Aboriginal Health[3] and the First Nations and Inuit Health Branch[11] of Health Canada.

At the national level, the government of Canada has committed to working closely with provinces, territories and Indigenous peoples to implement the recommendations of the *Truth and Reconciliation Commission* (TRC)[34]. This includes implementation of the *United Nations Declaration on the Rights of Indigenous Peoples*. Various calls to action in the TRC are directly pertinent to the health of Indigenous people in Canada, including:

> **#18** "We call upon the federal, provincial, territorial, and Aboriginal governments to acknowledge that the current state of Aboriginal health in Canada is a direct result of previous Canadian government policies, including residential schools, and to recognize and implement the health-care rights of Aboriginal people as identified in international law, constitutional law, and under the Treaties."

Calls to action # 19-22 are also relevant for health and should be considered.

The *UN Declaration on the Rights of Indigenous Peoples* (UNDRIP) also contains various articles pertinent to health, including:

> **Article 23**. Indigenous peoples have the right to determine and develop priorities and strategies for exercising their right to development. In particular, Indigenous peoples have the right to be actively involved in developing and determining health, housing and other economic and social programmes affecting them and, as far as possible, to administer such programmes through their own institutions.
> **Article 24.1.** Indigenous peoples have the right to their traditional medicines and to maintain their health practices, including the conservation of their vital medicinal plants, animals and minerals. Indigenous individuals also have the right to access, without any discrimination, to all social and health services.
> **Article 24.2.** Indigenous individuals have an equal right to the enjoyment of the highest attainable standard of physical and mental health. States shall take the necessary steps with a view to achieving progressively the full realization of this right.

Commitment is also demonstrated by various health research bodies provincially and nationally. The Indigenous Peoples' Health Research Centre (IPHRC) is working to improve and strengthen the quality of Indigenous health research and the health of Indigenous people[8], and the Saskatchewan Population Health and Evaluation Research Unit (SPHERU) acknowledges northern and Indigenous health as a key priority area in its efforts to address health inequities through population health intervention research[9]. Building capacity for Indigenous health research is also a strategic goal of the Saskatchewan Health Research Foundation (SHRF)[10]. Further, one of the Canadian Institutes of Health Research (CIHR) ten signature initiatives is "Pathways to Health Equity for Aboriginal Peoples". Through Pathways, CIHR and partners (including SHRF) aim to contribute to the creation of better preventative health services, healthier communities and health equity for First Nations, Métis and Inuit peoples in Canada[12].

Canadian medical professional organizations have also demonstrated commitment to addressing Indigenous health inequities. In their 2017-2022 strategic plan, the College of Family Physicians of Canada (CFPC) outlines the following objectives under goal 2, "Meet the evolving health care needs of our communities":

> **2.2** Advocate for equitable health outcomes for vulnerable/marginalized groups, including (but not limited to) Indigenous, rural and remote populations[35].

The CFPC also recently published a report outlining their actions to address the Truth and Reconciliation Commission of Canada, which includes promoting Indigenous health standards for family medicine residency training programs and raising the profile of Indigenous health in the CanMEDS-FM framework of competencies[36].

In spite of considerable health challenges, Indigenous peoples continue to demonstrate incredible resilience and growing capacity for addressing these inequities[4]. There is also increasing capacity and focus on wellness amongst Indigenous people and communities. Cultural and traditional principles, values and beliefs need to be at the forefront of delivering the supports and services to improve the Indigenous healthcare experience[7]. In affiliation with the Regina Qu'Appelle Health Region, the All Nations Healing Hospital, recognizes the importance of community-oriented, integrated health services that incorporate cultural support (e.g., ceremony, cross cultural education, access to Elders)[31]. A strengths-based approach to community health is key for positive work with Indigenous communities, and community members need to be meaningfully engaged in identifying priorities as well as appropriate solutions.

Training on Indigenous Peoples and their Health for Medical Students

Health training should embrace and Indigenous worldview and a wholistic definition of health and wellness[7]. Curriculum programming related to Indigenous health inequities should highlight the interconnectedness between these health inequities and their rooting in historical and ongoing policies (i.e., residential schools, the

60s scoop, Indian Act, etc.) and the determinants of health. Shifting the paradigm away from pathologizing narratives towards a strengths-based approach (i.e., focusing on what makes Indigenous communities strong and resilient) is also crucial for finding an ethical space to respectfully bring together two ways of knowing. Various national bodies provide particular mandates and appeals for training on Indigenous peoples and their health for medical students.

The Truth and Reconciliation Commission of Canada calls upon those who can affect change to:

> **#22** "…recognize the value of Aboriginal healing practices and use them in the treatment of Aboriginal patients in collaboration with Aboriginal healers and Elders where requested by Aboriginal patients"
>
> **#23 iii.** "[p]rovide cultural competency training for all health-care professionals,"
>
> **#24.** "We call upon medical and nursing schools in Canada to require all students to take a course dealing with Indigenous health issues, including the history and legacy of residential schools, the UN Declaration of the Rights of Indigenous Peoples, Treaties and Aboriginal rights, Indigenous teachings and practices and notes that this will require skills-based training in intercultural competency, conflict resolution, human rights and anti-racism"[13].

The Royal College of Physicians and Surgeons of Canada recognizes the role of physicians and surgeons in Indigenous health within their 2015-2017 Strategic Plan[37]. Their overarching principle in this area states:

> "The (health) care of an Indigenous person reflects the dimensions of quality for patient-centered care that resonate with his/her culture in all stages of that person's life. The physician demonstrates empathy, open mindedness, consensus and understanding of the issues facing Indigenous people and the determinants of health that contribute to their health status. The decision making process recognizes the value of Indigenous peoples' self-determination through the principles of ownership, control, access and possession and the benefits of making unencumbered and informed choices to promote health sustainability and equity."

The Royal College outlines a number of proposed strategies for moving from ideology to action in its 2013 *Proposed Directions to Move from Ideology to Action* report[38]. One of their recommendations asserts that beyond promoting culturally safe care through curriculum, expansion of the OSCE to include clinical evaluations of physicians treating Indigenous patients could further entrench efforts[39].

Medical students themselves are asking for greater content in this area. In their position paper, *Indigenous Peoples and Health in Canadian Medical Education*, the Canadian Federation of Medical Students (CFMS) advocates for

(i) the implementation of mandatory, culturally safe Indigenous health curricula during pre-clerkship training,

(ii) implementation of experiential learning modules into pre-clerkship curricula, in order to promote understanding, validation and respect of Indigenous knowledge and cultural practices,

(iii) implementation of robust clinical elective experiences during clerkship in Indigenous health and evaluation of elective outcomes for the learner, as well as patients and communities, among other non-curricula related recommendations[40].

They note experiential learning – particularly learning that moves beyond didactic teaching methods and instead enables students to engage more directly with Indigenous peoples - as crucial for overcoming barriers in culturally inclusive learning.

A recent study by Beavis and colleagues (2015) explored how postcolonialism and health should be included and delivered in Canadian healthcare training programs. Study participants (a) had experience teaching postcolonialism in a healthcare training program in Canada, (b) occupied various roles such as clinicians, academics and policy makers, and; (c) worked or taught in the field of disability or rehabilitation and the voices

of Aboriginal People in Canada were specifically sought. The study uncovered particular themes related to training program *content (i.e., what should be taught)* and *delivery (i.e., teaching strategies, who should teach, when content should be taught),* noting that teaching this content is essential for increasing health equity[109].

Program content

What content should be taught?

- The experiences of indigenous communities resulting from colonialism in Canada
- How structures of power rooted in colonialism continue to create health inequities in Canada
- How Canadian healthcare providers' own experiences of privilege and oppression affect their practice

Program delivery

How should the content be taught?

- A combination of various methods: interactive methods (i.e., case studies, small group work or class discussion), experiential learning (e.g., attending local Aboriginal events, participating in traditional cultural practices or ceremony, clinical placements, site visits to organizations and communities) but in a way that is not invasive and provides adequate preparation
- Depends on factors such as class size and students' level of education
- Importance of evoking an emotional response from students
- Include the lived experience of Aboriginal people (e.g., invite guest speakers, conduct sharing circles with Elders, use various media such as film and literature)
- Explicitly included in course objectives and examinations

Who should teach it?

- Indigenous educators should be directly involved in the design, review and teaching of curriculum related to Aboriginal history, tradition and present-day issues; every effort to identify and build relationships with these instructors should be taken
- Instructors should form partnerships with Elders
- Instructors should be aware of the importance of creating a safe space for educators and learners

When should this content be taught?

- Early in the curricula and integrated throughout in a longitudinal approach
- Caution against teaching as a single class or course; rather, instructors should strive to include concept into various parts of curricula and revisit critical concepts regularly to emphasize their importance
- Students should demonstrate their understanding of the material prior to interacting with patients, especially Aboriginal patients

Competencies Related to Indigenous Health – MCC, CFPC, IPAC-AFMC

The CanMEDS framework, which describes the abilities physicians require to effectively meet the health care needs of the people they serve, outlines various enabling competencies or objectives for many of its defined roles that are particularly relevant to Indigenous health inequities[41]. Canadian medical professional organizations, such at the College of Family Physicians of Canada (http://www.cfpc.ca/uploadedFiles/Education/CanMEDS-FMU_Feb2010_Final_Formatted.pdfCFPC) and the Medical Council of Canada (MCC), have further expanded on the CanMEDS role competencies with focus on Indigenous health (see Table 1).

The Indigenous Physicians Association of Canada (IPAC), in Partnership with the Association of Faculties of Medicine of Canada (AFMC) released a core competencies curriculum framework for undergraduate medical education in February 2008 (see Table 1). The framework holds *cultural safety* as a key competency, with the central tenet being that "it is the patient who defines what "safe service" means to them." Cultural safety is also

about power differentials that shift the paradigm beyond cultural awareness/sensitivity/competency (all of which require practitioners to learn about their patients) to a critical analysis of themselves and how their privileges, biases, attitudes, etc. directly impact the health services they deliver. Cultural safety also considers structural issues, which includes broader socio-political contexts, both historic and current. This avenue opens up learning opportunities about the unique histories, current challenges and successes of Indigenous peoples in achieving equitable health and wellness and encourages physicians to ask patients what matters most to them in their experience of illness and its treatment.

Table 1: CanMEDS roles and Indigenous health competencies and objectives from various medical professional organizations.

CanMEDS Role	Enabling Competency
Communicator	**MCC** 4.1 Facilitate discussions with patients and their families in a way that is respectful, non-judgmental, and culturally safe. **CFPC** 2.12. Demonstrates sensitivity to cultural differences between physicians and patients and encourages patients to help their physician to understand these differences (new Canadian, First Nations, etc.). **IPAC-AFMC** *Students are able to…* 2.1 Describe cultural safety as it pertains to First Nations, Inuit and Métis patients. 2.2 Identify the centrality of communication in the provision of culturally safe care, and engage in culturally safe communication with First Nations, Inuit and Métis patients, families and communities. 2.3 Demonstrate the ability to establish a positive therapeutic relationship with First Nations, Inuit, Métis patients and their families, characterized by understanding, trust, respect, honesty and empathy.
Health Advocate	**MCC** 1.1 Work with patients to address determinants of health that affect them and their access to needed health services or resources. 2.1 Work with a community or population to identify determinants of health that affect them. 5.13. The learner will understand the special needs of vulnerable groups related to seeking receiving care (e.g., Aboriginals, recent immigrants, same-sex relationships, work status and poverty). (*CFPC*) **IPAC-AFMC** *Students are able to…* 5.1 Outline the concept of inequity of access to health care/health information for First Nations, Inuit, Métis peoples and the factors that contribute to it. 5.2 Identify ways of redressing inequity of access to health care/health information with First Nations, Inuit, and Métis patients/populations.
Professionalism	**MCC** 2.1 Demonstrate accountability to patients, society and the profession by responding to societal expectations of physicians. **IPAC-AFMC** *Students are able to…*

	7.1 Identify, acknowledge and analyze one's own considered emotional response to the many histories and contemporary environment of First Nations, Inuit, and Métis peoples and offer opinions respectfully. 7.2 Acknowledge and analyze the limitations of one's own knowledge and perspectives, and incorporate new ways of seeing, valuing and understanding with regard to First Nations, Inuit, Métis health practice. 7.3 Describe examples of ways to respectfully engage with and give back to First Nations, Inuit and Métis communities as a medical learner. 7.4 Demonstrate authentic, supportive and inclusive behaviour in all exchanges with First Nations, Inuit and Métis individuals, health care workers and communities.
Manager	**IPAC-AFMC** *Students are able to…* 4.1 Discern the concepts of community development, ownership, consultation, empowerment, capacity-building, reciprocity and respect in relation to health care delivery in and by First Nations, Inuit and Métis communities. 4.2 Identify key First Nations, Inuit, Métis community contacts and support structures in the provision of effective health care. 4.3 Describe successful approaches that have been implemented to improve the health of First Nations, Inuit, Métis peoples, either locally, regionally or nationally.
Collaborator	**IPAC-AFMC** *Students are able to…* 3.1 Identify key principles in developing collaborative and ethical relationships. 3.2 Describe types of Aboriginal healers/traditional medicine people and health care professionals working in local First Nations, Inuit and/or Métis communities, and how they are viewed in the community. 3.3 Demonstrate how to appropriately enquire whether a First Nations, Inuit, Métis patient is taking traditional herbs or medicines to treat their ailment and how to integrate that knowledge into their care.
Scholar	**IPAC-AFMC** *Students are able to…* 6.1 Describe appropriate strategies to work with First Nations, Inuit, and Métis populations to identify health issues and needs. 6.2 Engage in effective strategies to share and promote health information with First Nations, Inuit, and Métis patients/populations. 6.3 Describe various ways of respectfully acquiring information (in a transparent manner) about First Nations, Inuit, and Métis populations which involves communities as partners. 6.4 Critically appraise the strengths and limitations of available data used as key indicators of Canadian Aboriginal health. 6.5 Demonstrate ways to acknowledge and value Indigenous knowledge.
Medial Expert	**MCC** *Health of special populations, including First Nations, Inuit and Métis peoples.* Enabling objectives:

	o Describe the diversity amongst First Nations, Inuit, and/or Métis communities in your local area in terms of their various perspectives, attitudes, beliefs and behaviours. Describe at least three examples of this cultural diversity. o Describe the connection between historical and current government practices towards First Nations, Inuit, Métis peoples (including, but not limited to colonization, residential schools, treaties and land claims), and the intergenerational health outcomes that have resulted. o Describe how the medical, social and spiritual determinants of health and well-being for First Nations, Inuit, Métis peoples impact their health. o Describe the various health care services that are delivered to First Nations, Inuit, Métis peoples, and the historical basis for the systems as they pertain to these communities. **IPAC-AFMC** *Students are able to…* 1.1 Describe the connection between historical and current government practices towards First Nations, Inuit, Métis peoples (including, but not limited to colonization, residential schools, treaties and land claims), and the resultant intergenerational health outcomes. 1.2 Describe the various health care services that are delivered to First Nations, Inuit, Métis peoples, and the historical basis for the systems as they pertain to these communities. 1.3 Identify the diversity amongst First Nations, Inuit, and/or Métis communities in your local area in terms of their various perspectives, attitudes, beliefs and behaviours. Describe at least three examples of this cultural diversity. 1.4 Articulate how the medical, social and spiritual determinants of health and well being for First Nations, Inuit, Métis peoples impact their health. 1.5 Identify and describe the range of healing and wellness practices (traditional and nontraditional) present in local First Nations, Inuit and Métis communities.

Resources for Medial Curriculum Planning and Delivery - Indigenous Health

There are various resources that may be useful in supporting the integration of training on Indigenous health inequities in medical curriculum (see Table 2).

Table 2: Training on Indigenous Peoples and their health for medical students – Resources

Reports and Guidelines	• Health and Health Care Implications of Systemic Racism on Indigenous Peoples in Canada (2016, CFPC) – brief guide for physicians to help understand the role that systemic racism can play in shaping an Indigenous patient's clinical experience and what they can do about it in their clinical practice, in their community, in advocacy efforts. etc. The document was developed in an effort to address the recommendations made in the TRC. • Cultural Competency & Cultural Safety Toolkit (2016, Saskatoon Health Region Public Health Observatory) – provides various learning resources for engaging in reflection, relationship building and reconciliation • Addressing the Healing of Aboriginal Adults and Families within a Community-owned College Model (April 2015, NCCAH) - explores the potential for healing strategies within the education domain; examines how programs and curriculum have the potential to disrupt the intergenerational transmission of trauma

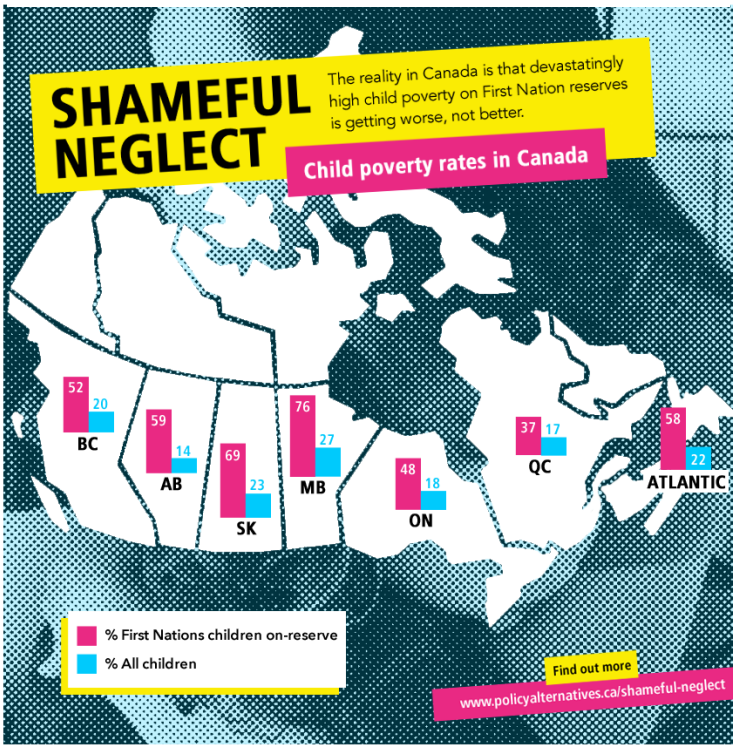
	• Policies, Programs and Strategies to Address Aboriginal Racism: A Canadian Perspective (July 2014, NCCAH) – examines anti-oppressive education, cultural safety within health care, and systemic policies. • Advancing Health Equity in Health Care – Cultural Considerations: Aboriginal Peoples in Canada (2014, Public Health Observatory) – a brief history of colonization and its sustained impact on health. • Towards Cultural Safety for Métis: An introduction for health care providers (January 2013, NCCAH) – fact sheet demonstrates how health care providers can create a culturally safe environment when caring for Métis patients. • Indigenous health fact sheet (2013, Royal College of Physicians and Surgeons of Canada) – a quick resource containing facts about health inequities and disparities in health outcomes of Indigenous communities. • Health Professionals Working with First Nations, Inuit and Métis Consensus Guidelines (2013, Journal of Obstetrics and Gynecology Canada) – aims to provide health care professionals in Canada with the knowledge and tools to provide culturally safe care. • Cultural Competence Education for Students in Medicine and Public Health: Report of an Expert Panel (2012, ASPH & AAMC) - provides recommendations to faculty and administrators developing and administering curricula in schools of medicine and the health sciences. • Access to primary health care in rural and remote Aboriginal communities: Progress, challenges and policy directions (December 2011, NCCAH) – offers students and practitioners a valuable resource for understanding the special, ever-changing needs of rural communities. • A Comprehensive Framework and Preferred Practices for Measuring and Reporting Cultural Competency (2009) – adopted by Saskatoon Health Region, outlines practices in the clinical encounter that physicians may adopt (pg. 20, 22) as well as strategies around communication, health literacy, etc. • Cultural Competency and Safety: A Guide for Health Care Administrators, Providers and Educators (2008, NAHO) – looks at culturally safe environments in education and how culturally safe environments in health care and education are applied to Indigenous peoples. Also see PowerPoint presentation below.
Webinars	• What's new is really old: Trauma informed health practices through an understanding of historic trauma (April 2017, NCCAH) – provides an overview of pre-contact values and laws; explores the complexities of historic trauma and lateral violence within communities; reviews current trauma-informed health practices. • Cultural safety for Indigenous peoples: A determinant of health (February 2016, NCCAH) – explores how racism has manifested in the way health care services are provided to Indigenous peoples and is thus a barrier to optimal health. • Anti-Aboriginal Racism in Canada: A Social Determinant of Health (October 2015, NCCAH) – overviews race as a form of social hierarchy, expressions of racism and the impact of lived and structural racism on Indigenous peoples; examples of efforts to address racism including anti-oppressive education and cultural competency.
Case Studies	• *The 2009 HINI influenza pandemic among First Nations, Inuit and Métis peoples in Canada: Epidemiology and gaps in knowledge* (October 2016, NCCAH) • *Pandemic planning in Indigenous Communities: Lessons learned from the 2009 HINI influenza pandemic in Canada* (October 2016, NCCAH) • *Treatment and Respect for Difference: Aboriginal Health* (December 2013, Royal College of Physicians and Surgeons of Canada)

PowerPoint Presentations	• Cultural Competency and Safety: A First Nations, Inuit and Métis Context & Guidelines for Health Professionals (2007, NAHO) • Broader Determinants of Health in an Aboriginal Context (2006, NAHO).

Poverty-related Health Inequities – The Widening Gap and the Cost to Health Care

The research on health inequalities between richer and poorer Canadians is well established[16]. Some researchers consider socioeconomic status (SES) to be the most important determinant of health[14] and income as the single most important determinant of disease and disorder in our communities[15]. Canadians spend more than $200 billion (40% of most provinces' budgets) annually on publicly funded healthcare, yet inequities in access to care and health outcomes persist; in general, richer Canadians tend to be healthier and live longer than poorer Canadians[16]. Those living in or near poverty suffer a host of poorer health outcomes[15] including low birth weight, diabetes, cardiovascular disease, injury and/or poisoning, chronic pulmonary disease, mental health disorders, asthma and suicide[15]. In Saskatchewan particularly, income-related inequality for self-rated mental health, diabetes, obesity among women, COPD hospitalizations, fall injury hospitalization for seniors, and alcohol-attributable hospitalization has increased[101].

Figure 1: Child Poverty Rates in Canada 2016



https://www.policyalternatives.ca/publications/facts-infographics/infographics-shameful-neglect

Since the early 2000s, these economic inequalities have persisted or have widened[16]. Between 1993 and 2011 income inequality increased in all Canadian provinces, including Saskatchewan[11]. In 2012, the top 10% of Canadians owned almost half (47.9%) of all wealth while the bottom 50% of Canadians owned less than 6%[17]. In 2014 there were 160,000 people in Saskatchewan living in poverty; 14.8% of our population lacked the income needed to afford basic necessities[1]. But poverty is not experienced equally across the generalized population. Some groups, such as women, children, lone parent families, Indigenous peoples, recent immigrants, rural, and individuals living with disability, are more likely to experience poverty than others[18]. In 2013 in Saskatchewan, the child poverty rate was 25%, compared to the overall poverty rate of 14.9%, and the median income of single parent families (before tax) was $36, 420 [107]. For children in Indigenous families in 2010 the poverty rate was 59.0%[1].

Poverty costs. The economic cost of Poverty in Saskatchewan was recently calculated to be $3.8 billion annually in heightened service use and missed economic opportunities[15]. Increased disease prevalence among lower socioeconomic individuals has led to disproportionately high utilization of hospitals, physicians and medications[2]. In Saskatchewan, poverty costs $420 million a year in heightened health care service usage[15]. Beyond creating severe health inequities among our population, poverty jeopardizes the sustainability of our

healthcare system, costs our economy dearly and it threatens to undermine the very cohesiveness of our communities[15]. The good news is, income status is modifiable.

Addressing Poverty – Commitment at the Local, Provincial and National Level

Poverty reduction is a priority at the local, provincial and national levels. Results of a 2008 Saskatoon health disparity study led to policy changes at the Saskatoon Health Region and increased financial resources to six low income neighbourhoods. A host of local agencies (i.e., University of Saskatchewan Department of Paediatrics, United Way, Catholic and Public School Boards, Saskatoon Tribal Council, City of Saskatoon, etc.) also dedicated resources to Saskatoon's low income neighbourhoods and the Government of Saskatchewan allocated $40 million dollars for low income subsidized housing[2]. In Regina, the Regional Anti-Poverty Ministry (RAMP) continues to advocate for the changes outlined in Poverty Free Saskatchewan's 2010 *Let's Do Something About Poverty* report in the wake of startling statistics[32].

At the national level, Canada joined a number of nations in 2011 in a commitment to implement the Rio Political Declaration on Social Determinants of Health[19], acknowledging that social and health equity is achieved through action on the social determinants of health and is a shared responsibility of all sectors of government. The declaration states: "the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition"[19].
The Canadian Medical Association, in their 2013 report *Health care in Canada: What Makes us Sick?* stands behind a number of recommendations around poverty and health:

1. That the federal, provincial and territorial governments give top priority to developing an action plan to eliminate poverty in Canada.
2. That the guaranteed annual income approach to alleviating poverty be evaluated and tested through a major pilot project funded by the federal government.

In addition to financial support to address this social issue, the Government of Saskatchewan declared in the 2014 Speech from the Throne its commitment to develop a Poverty Reduction Strategy and an advisory group was formed to provide recommendations. The group engaged (through roundtable discussions, online survey, meetings) with health regions, government representatives, First Nations and Métis organizations, the education sector, childhood development agencies, individuals with lived experience and organizations that serve vulnerable populations in development of the strategy. Six key areas of action outlined in the recommendations are:

1. income security,
2. housing and homelessness,
3. early childhood development and child care,
4. education, skills training and employment,
5. health and food security, and
6. vulnerable families and individuals.

The Government of Saskatchewan adopted the strategy in 2016 with the aim of reducing the number of residents who experience poverty for two or more years by 50% by the end of 2025[18].

Training on Poverty-Related Health Inequities for Medical Students

Curriculum programming related to poverty should emphasize socioeconomic status as an important determinant of health and outline the extent - and growing level - of the inequity across various social groups with implications for health outcomes. Education about poverty interventions at the community level (i.e., housing, social assistance, government benefits programs, etc.) and the role of other professionals (e.g., social workers) and community organizations (e.g., free tax clinics) should also be included[20]. Training for health advocacy (e.g., teaching medical students and residents about how to influence the system and advocate for

polices that will address poverty) is a professional responsibility and a promising avenue for change[21]. Opportunities for experiential, community-engaged and inter-professional learning is a way of supplying real-time education on how the social, political and economic conditions impact the health of individuals and populations[22].

The role of health professionals in addressing poverty and health inequities more broadly is outlined in the CMA's *Physicians and Health Equity: Opportunities in Practice* 2012 report. Physicians interviewed identified common areas of intervention in practice, including:

1. Linking patients with supportive community programs and services
2. Asking questions about a patient's social and economic circumstances
3. Integrating considerations of social and economic conditions into treatment planning (i.e., cost of medications)
4. Advocating for changes to support improvements in the social and economic circumstances of the community (i.e., advocating for reductions in child poverty)
5. Undertaking advocacy on behalf of individual patients (i.e., letters about the need for safer housing)
6. Adopting equitable practice design (i.e., flexible office hours, convenient practice location)
7. Providing practical support to patients to access the federal and provincial/territorial programs for which they qualify.

A participatory action research study conducted by Hudon and colleagues (2016) brought together healthcare professionals and persons living in poverty to explore needs and expectations in medical training regarding poverty and its effects on health and healthcare[108]. Four thematic barriers between healthcare teams and persons living in poverty identified through the project:

- Improving medical students' and residents' knowledge on poverty and the living conditions of persons living in poverty;
- improving their understanding of the reality of those people;
- improving their relational skills pertaining to communication and interaction with persons living in poverty;
- improving their awareness and capacity for self-reflection by helping them identify and recognize their biases and limitations.

The authors of the study conclude that medical schools should strengthen their curricula in such a way that future physicians are better prepared to deal with poverty and its impacts on health and healthcare.

Competencies Related to Poverty - MCC

The Medical Council of Canada recognizes knowledge around the health of special populations, as a key attribute of medical graduates under the CanMEDS role of "medical expert". Key objectives in this area included in Table 3 below.

Table 3: MCC Medical Expert Role and the Health of Special Populations

CanMEDS Role	Poverty-Related Competency
Medical Expert	o Understand how variation in the determinants of health in different populations promotes or harms their health status. o Discuss how populations may have challenges with respect to access to health services, and how members of the population may rely on traditional or alternative sources of health services that are not commonly used by society as a whole.

	o Discuss the unique roles provided by government, social agencies, or special groups (e.g. Indigenous health centres, Traditional healers) in providing services to the population.

Resources for Medical Curriculum Planning & Delivery – Poverty

Table 4: Training on Poverty and its Health Implications for Medical Students – Resources

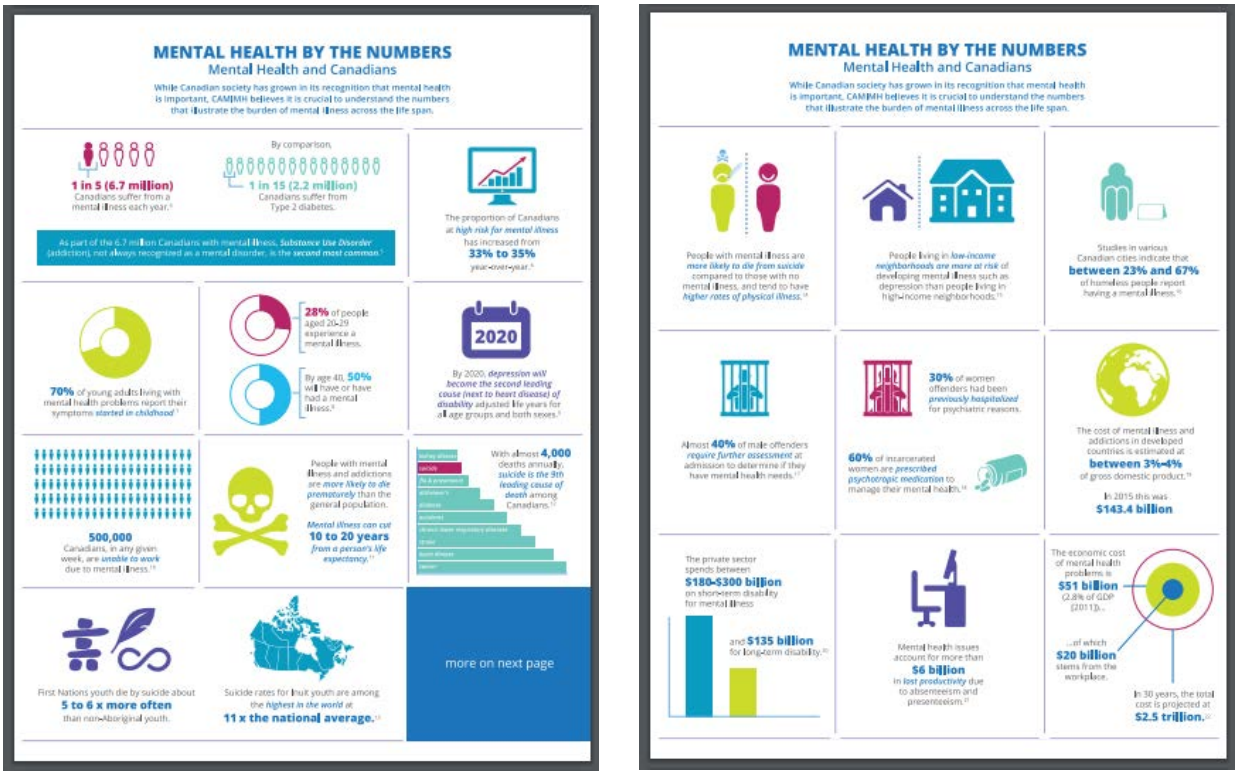
Reports and Guidelines	• *Creating a Culture of Inclusion – "Nothing About Us, Without Us"* (2017, SPRP) – a practical guide for community groups & employers to include people with the lived experience of poverty in their work. Guide is recognized as best practice across Canada and won an award in spring 2017 by Vibrant Communities' Canada. • *Our People & Poverty – The Costs of Living for Families in Saskatoon* (2017, SPRP) – local statistics on poverty. • *Saskatoon Health Region – Social Determinants of Health* (2017) – high level overview of the current status of income inequality, unemployment, housing costs, educational attainment, etc. in Saskatoon. • *Office Interventions for Poverty* (2013, Ontario Medical Review Series on Poverty and Health) – article suggests actions that physicians can take to mitigate the effects of income inequality on their patients. • *Office Interventions for Poverty: Child Health* (2013, Ontario Medical Review Series on Poverty and Health) – article focused on the role of physicians on the importance of interventions into poverty and heath when it comes to children. • *Office Interventions for Poverty: Racialized Groups* (2013, Ontario Medical Review Series on Poverty and Health) – fourth article in 5-part series on medical interventions into poverty focused on two specific groups: Indigenous peoples and new immigrants and refugees. • *Identifying Poverty in Your Practice and Community* (2008, The Ontario Physicians Poverty Work Group) – how poverty is measured and how this information can be used for clinical practice and public policy.
Clinical Toolkits	• *Poverty: A Clinical Tool for Primary Care Providers – Saskatchewan (2016)* - This clinical tool offers specific resources to help health care providers screen for and respond to poverty concerns in patient encounters. The tool is individualized for each participating province (including Saskatchewan) and territory, designed for quick and intuitive use in day-to-day practice and endorsed by the College of Family Physicians of Canada (CFPC) and its provincial chapters. • Poverty: A Clinical Tool for Primary Care in Manitoba (2015, The Manitoba College of Family Physicians) – three ways to address poverty in primary care, including screening, adjusting risk and intervention. • *Poverty Intervention Tool* (2014, Division of Family Practice GPSC). – steps to address poverty in a clinical encounter.
Learning Modules and Case Studies	• *Make the Month Online Poverty Simulation* (2017, United Way) – digital poverty simulation that aims to help Canadians understand and experience what its like to have to make your paycheck last the month. • *Poverty and Health: Key Issues in Patient Care* (2014, Family and Community Medicine University of Toronto) – modules and case studies that provide a learning resource for physicians dealing with common medical and psychosocial issues that have an impact on families.

	• If You Want to Help Me, Prescribe Me Money (2013, TEDxStouffville) – video with *Health Providers Against Poverty* founder, Gary Bloch, that connects the evidence to action and proposes radical rethinking of the role of doctors in addressing income and other social issues that affect their patient's health.

Mental Health Challenges and Suicide Risk – Disproportionate Experience by Various Populations

In any given year, one in five Canadians experience a mental health problem or illness[23] and 7 million Canadians will need help for mental health concerns in a given year[24]. Every single Canadian is affected by mental health issues, either directly with firsthand experience or indirectly through someone they know[24]. Of the 4,000 Canadians who die annually as a result of suicide, most were confronting a mental health problem or illness[24]. Mental illness costs the Canadian economy an estimated $33 to $50 billion per year in lost productivity. Dementia prevalence is expected to increase to 1.1 million by 2038, at the tune of $153 billion dollars[25]. The World Health Organization predicts that by 2030 the economic burden of depression alone will exceed the costs of all other physical diseases[26]. But mental health and suicide risk is not experienced equally across Canadians; various populations are at higher risk.

Figure 2: Mental Health in Canada Infographic



More available on Mental Health Now! (September 2016)

Mental illness is experienced disproportionately across various social groups, including Indigenous peoples, those of low socioeconomic status, children and youth. In 2000, the suicide rate for Indigenous populations in Canada was 24.1 (per 100,000 population) in comparison to the national average of 13.2 and was concluded in a 2005 report to be the leading cause of death among those aged 10 to 44 years[28]. Indigenous youth commit suicide 5-6 times more often than non-Indigenous youth[23].

An overwhelming majority of people with disabling mental health conditions are living in poverty[28]. Recent evidence reveals that income-related inequalities in self-rated mental health have notably increased over time in Canada[101]. Poverty reduction is identified as a necessary component of the federal government's mental health strategy for Canadians[29] - recovery is not possible without "the fundamental elements of community to which [everyone] should have access: housing, education, income and work"[23].

Socioeconomic status intersects with age in that low socioeconomic status youth are 2.5 times more likely to suffer from depressed mood or anxiety than youth with higher socio-economic status[2]. The World Health Organization predicts that by 2020 childhood and adolescent mental health problems will become one of the leading causes of morbidity, mortality and disability among children worldwide[2]. The recent 2016 Saskatchewan Youth Health Survey of students grades 7-12 revealed that nearly 1 in 5 (19%) of students had considered suicide in the past year and half (50%) of those who had considered it, had also attempted suicide during that time. Further, 38% of male and 59% of female students had felt so sad or hopeless within the last year that they had stopped their regular activities for a while.

Addressing Mental Health Inequities – Commitment at the Provincial and National Level

Mental health and addictions is identified by the Saskatchewan Ministry of Health as a strategy to close the health disparity gap, with the goal of increasing access to quality mental health and addictions services and reducing wait time for outpatient and psychiatry services by March 31, 2019[27]. The Government of Saskatchewan's *10 Year Mental Health and Addictions Action Plan* outlines a vision to ensure

(i) mental health and addictions support is available across the lifespan with services that are easily accessible through any point of entry and are responsive to client, family and caregiver needs; and

(ii) "[a]ll residents of Saskatchewan will have access to appropriate and coordinated mental health and addictions services that promote recovery to the greatest extent possible, improve mental well-being, and ultimately enhance the overall health and vibrancy of our communities and our province"[26].

Provincially, the Government of Saskatchewan is committed to mental health and addictions and has a dedicated strategy around this issue in the *2017-18 Ministry of Health Report*. Ensuring residents of Saskatchewan have access to appropriate and coordinated mental health and addictions services, improving mental health and well-being and ultimately enhancing the overall health and vibrancy of our communities and province is the overarching goal of this strategy.

At the federal level, the Mental Health Commission of Canada, in close consultation with people living with the mental illness, families, stakeholder organizations, government and experts, drafted the first mental health strategy for Canada. The strategy recognizes that greater attention must be paid to promotion and prevention and highlights six strategic directions:

1. promote mental health across the lifespan and prevent illness wherever possible,
2. foster recovery and well-being for people of all ages,
3. provide access to the right combination of services,
4. reduce disparities in risk factors and access to services and strengthen the response to diverse community needs,
5. work with Indigenous peoples to address their mental health needs, acknowledging their distinct circumstances, rights and cultures, and
6. mobilize leadership, improve knowledge and foster collaboration at all levels[23].

Further the Canadian Medial Association (CMA) provides its own position on mental health.
The CMA believes Canada should work toward a strong system of mental health services that includes:

- access to a well-funded continuum of services, from in-hospital treatment to community-based care and support
- adequate community support for people with mental health disorders that addresses income, housing and employment
- focused public awareness campaigns and other initiatives to combat stigma and discrimination against people with mental illness

Training on Mental Health Inequities for Medical Students

Medical professionals need to be attuned to the different experiences of mental health across diverse social groups, and work to modify services, treatments and support to make them more welcoming and effective[23]. Significant barriers to seeking and obtaining appropriate help exists not only among Indigenous people, youth, and individuals with low socioeconomic status, but also immigrants, refugees, Francophones and individuals who experience stigma and discrimination on the basis of gender, sexual orientation, disability, ethnicity and culture.

Training around mental health services and resources, appropriate screening tools, brief interventions and clear clinical pathways should be provided to future healthcare professionals. Team-based health care training that includes mental health and addictions counsellors and consultant psychiatry can improve access to specialized care and improve outcomes[26]. Health advocacy also has a role to play (e.g., promotion of community health initiatives and mental health resources) and adapting the service culture to one which is more person- and family-centered promotes recovery and enhances service. The Mental Health Commission of Canada's family and caregiver guidelines provide evidence-based best practices to service providers[30].

Competencies Related to Mental Health – MCC, Royal College of Physicians and Surgeons Canada, Mental Health Commission, CFPC, CPA, CMA

The CFPC in partnership with the Canadian Psychiatric Association (CPA), provided a position statement on mental health care in Canada, that emphasizes collaborative models for improving access to mental health care and increased capacity of primary care to manage mental health and addiction problems. They note the important role of academic centres and continuing education departments in preparing learners and practitioners to work in collaborative interprofessional partnerships by:

1. Strengthening interdisciplinary collaborative partnerships within the curricula of undergraduate and postgraduate programs, so that collaborative care becomes an integral and expected part of practice for future practitioners
2. Finding ways for learners from different disciplines to learn together and from each other
3. Involving people with lived experience in educational sessions

Mental health issues are outlined in the Medical Council of Canada's objectives for medical graduates under the CanMEDS role "medical expert", including substance withdrawal, major/mild neurocognitive disorders (dementia), personality disorders, psychosis, anxiety and mood disorders. The Mental Health Core Competencies Steering Committee (a collaborative group from Royal College of Physicians and Surgeons of Canada, Mental Health Commission of Canada, College of Family Physicians of Canada, Canadian Psychiatric Association, Canadian Medical Association, and persons with lived experience) outlines key mental health core competencies for physicians based on the CanMEDS framework in their June 2014 report.

Table 5: CanMEDS Roles and Mental Health Competencies from Various Health Professional Organizations

Role	Mental Health Competencies
Medical Expert	o Physicians will have working knowledge of the symptoms, etiology, and basic treatment of mental health and addiction conditions that may influence a physical condition that they are treating. o Physicians will detect/recognize physical health conditions in patients who present with what appear to be mental health conditions. o Physicians will recognize the signs and symptoms of basic mental health conditions most common to their specialty practice, i.e.: Anxiety disorders, Mood disorders, Psychosis, Addictions, Grief, Situational stress, Cognitive impairment, Sleep disorders. o Physicians will undertake mental health screening where applicable. Recognizing the limits of their expertise, physicians will seek appropriate consultation from other health professionals.
Communicator	o Physicians communicate with their patients with respect and without stigma irrespective or their mental health condition.
Collaborator	o Recognizes and respects the diversity of roles, responsibilities and competencies of other professionals in relation to their own as it relates to mental health and addictions. o Works with and learns from others to assess, plan, provide and integrate mental health and addiction care for individual patients or groups of patients (shared, integrated care).
Manager	o Actively engages in the coordination with other health professionals for the care of their patients with mental health conditions, including the appropriate utilization of local community mental health resources.
Health Advocate	o Identifies opportunities for advocacy, health promotion and disease prevention to optimize the care of their patients with mental health conditions.
Scholar	o Identifies and integrates information and evidence related to the care of patients with mental health conditions in their specialty.
Professional	o Recognizes through self-reflection the impact or their behaviours, attitudes and knowledge gaps that may negatively impact the quality of care and health outcomes of their patients with mental health conditions.

Resources for Medical Curriculum Planning and Delivery - Mental Health

Table 6: Training on Mental Health Inequities for Medical Students – Resources

Reports and Guidelines	• Infant Mental Health Promotion (IMHP) provides a number of best practice and policy guidelines on the promotion of optimal development and well-being in infants (prenatal to age 3) and their families. • *Competencies for Practice in the Field of Infant Mental Health* (2011, IMPH and Hospital for Sick Children) – includes competencies guide and interactive learning module • *Core Prevention and Intervention for the Early Years* (2011, IMPH and Hospital for Sick Children) – intervention framework, interactive learning module and supporting references • IMHP also offers webcasts and videoconferencing distance learning opportunities, as well as Hand in Hand: Nurturing the Seed, a resource that can help practitioners use Indigenous ways of knowing to respectfully engage with and support Indigenous families.

	• The 2014 *Best Practice Guidelines for Mental Health Promotion Programs: Children and Youth* provides support and best practice advice for health and social services professionals who work with at-risk youth, families and whole communities to promote mental health (developed by the Centre for Addiction and Mental Health, the Dalla Lana School of Public Health at the University of Toronto and Toronto Public Health). The collaboration also provides *Best Practice Guidelines for Mental Health Promotion Programs: Older Adults 55+.* • *Recommendations on Screening for Depression in Adults* (2013, Canadian Task Force on Preventive Health Care) – for adults 18 years of age or older who present at a primary care setting with no apparent symptoms of depression, known depression or history of depression. • Best practice guidelines for mental health promotion programs for refugees • *Alzheimer Education Materials* (2012, Alzheimer Society of Canada, CFPC endorsed) – information and questionnaires to be used by patients, their family members and family doctors to be aware of early signs of Alzheimer's or other dementia. • *Ending Stigma and Achieving Parity in Mental Health: A Physician Perspective* (2010, CMA CPA, CPS, CFPC) – summary of workshop presentations
Resource Centres	• The Hospital for Sick Children (SickKids) have developed a mental health resource that provides credible, plain language content on children's mental health for caregivers. http://www.aboutkidshealth.ca/En/HealthAZ/HealthandWellness/MentalHealth/Pages/default.aspx# • The CAMH has an extensive resource list of accessible, reliable, professionally produced publications on an array of addiction and mental health topics for professionals and the public. http://www.camh.ca/en/education/about/camh_publications/Pages/default.aspx
Toolkits	• Collaborative Mental Health Care *Child & Youth Mental Health Toolkits*- practical, user-friendly resource for screening, assessment and treatment of child and youth mental health problems commonly presenting in primary care. • The General Practices Services Committee of British Columbia provides a plethora of online clinical tools and physician resources for both adult mental health and child and youth mental health.
Videos and Webinars	• Various webinars available (2017, Mental Health Commission of Canada) – regular webinars in many different areas of mental health • Stigma and Mental Illness (2012, MK Health Center and MHCC) – innovative video designed to help combat stigma attached to mental illness used to educate health care providers who work with children and youth
Elective Training	• The Centre for Addiction and Mental Health (CAMH) provides training opportunities for students in their respective disciplines at the University of Toronto CAMH teaching hospital. For more information http://www.camh.ca/en/education/professionals_in_training/student_placements/Pages/default.aspx
Courses	• The CAMH provides an extensive list of online courses, certificate programs and training in for clinicians. http://www.camh.ca/en/education/about/AZCourses/Pages/default.aspx

Other Issues that Warrant Further Consideration for Medical Curriculum Planning and Delivery – Climate Change and the Environment, Supporting Early Childhood Development

Climate Change and the Environment

Climate change is increasingly recognized as potentially one of the greatest threats to human health in the 21st century. Possible impacts include increased mortality, disease and injuries from heat waves and other extreme weather events; change in infectious disease vectors; increased malnutrition from effects on food yields; increased flooding in some areas with drought in others; impact on fresh water supply; increased foodborne and waterborne illnesses; warming and rising sea levels adding to displacement and salination; decreased air quality resulting in increases in cardio-respiratory morbidity and mortality, asthma and allergens; displacement of vulnerable populations; loss of livelihoods[102]. Health Canada recognizes that climate change impacts the health and well-being of Canadians.

The Canadian Medical Association (CMA) highlights the role of medical professionals in climate change mitigation and adopted climate change focused resolutions in 2015. Health professionals have a critical role to play in advancing public understanding of the potential impact of climate change on health and promoting health protecting responses (i.e. advocacy). In the area of health education, CMA recommends health science schools enhance their provision of educational programs on environmental health and fostering the development of continuing education modules on environmental health. They also recommend integration of health professionals into emergency preparedness plans so that front-line providers are adequately informed and prepared to properly manage any climate change related health emergencies.

Medical students are asking for enhanced education and curriculum around climate change and global health. A 2015 survey of Canadian medical students, conducted by the *Canadian Federation of Medical Students (CFMS)* found no time dedicated to the topic of climate change and its effects on human health, nor its impact on the future practice of medicine and in response, drafted a position paper that includes recommendation that:

> "Canadian medical schools need to comprehensively address the topic of climate change as it pertains to human health in the curriculum of undergraduate and postgraduate medical education programs".

The Medical Council of Canada recognizes environmental issues as a key attribute of medical graduates under the CanMEDS role of "medical expert".

> "Environmental issues are important in medical practice because exposures may be causally linked to a patient's clinical presentation and the health of the exposed population. A physician is expected to work with regulatory agencies and allied health professionals (e.g., occupational hygienists), where appropriate, to help implement the necessary interventions to prevent future illness. Physician involvement is important to the promotion of global environmental health."

Key objectives for medical graduates in this area include:

- Recognize the implications of environmental hazards at both the individual and population level.
- Respond to the patients concerns through appropriate information gathering and treatment.
- Work collaboratively with local, provincial and national agencies/governments as appropriate to address the concerns at a population level.
- Communicate with patients, communities, and employers, where appropriate, concerning environmental risk assessment.

Supporting Early Childhood Development

The early years of life are critical periods for children's development and many government ministries, non-governmental agencies and community organizations have mandates to care for and support children and families[106]. Provincially, the government of Saskatchewan has committed to addressing complex issues facing children, youth and families through the *Child and Family Agenda*.

The Ministry of Social Services, Government of Saskatchewan, has outlined two* dedicated strategies around child wellness in their 2017-18 report:

- *Children in out-of-home care are safe, have stability, and make successful life transitions.*

Key actions in this area include legislation to ensure regulations support contemporary social values and enable best practices in services and supports, and strengthening family- and community-based supports for children and youth in care.

- *Families are supported to safely care for their children*.

The key action in this area is expanding the types of interventions available to respond to reports of child neglect and abuse.

The Canadian Medical Association recognizes that in many ways, adult health is pre-determined by events in early childhood when crucial developments in physical, social, cognitive, emotional and language domains take place. Evidence suggests that adult diseases should be viewed as developmental disorders that begin in early life,[103] and that effective interventions could minimize or eliminate these outcomes. In relation to this and pertinent to medical curriculum, the CMA recommends that:

- Curriculum (including CME) on early brain, biological development and early learning be incorporated into all Canadian medical schools.
- Physicians serve as advocates on issues related to early childhood development.

The intersection between poverty and early childhood development is also crucial for health. Canada is one of the only wealthy nations with a child poverty rate that is actually higher than the overall poverty rate[104]. According to a 2009 report by the Chief Public Health Officer of Canada, of 27 factors seen to have an impact on child development, 80% of these showed improvement as family income increased[105]. Acknowledging this interconnectedness, the CMA recommends that:

- The federal government work with provinces and territories to adopt a national strategy to eradicate child poverty in Canada with clear accountability and measurable targets.
- Provinces and territories implement comprehensive poverty reduction strategies with clear accountabilities and measurable targets.

The College of Family Physicians of Canada (CFPC) and the Royal College of Physicians and Surgeons of Canada recognizes the importance of supporting early childhood development. The CFPC acknowledges the crucial connection between child poverty and health and has advocated that the federal government support the elimination of child poverty by 2020 and establish a National Child Strategy that includes appropriate leadership and support to ensure care providers across the country are properly equipped to meet the goals set. The Royal College has developed the *Early Brain and Biological Development and Early Learning* and others have also developed various resources to support medical training and practice in this area.

Table 7: Supporting Early Childhood Development – Resources

Source	Educational Resource
Royal College of Physicians and Surgeons Canada	• *Early Brain and Biological Development and Early Learning (EBBDEL)* – Educational and Practice Resources including videos, podcasts and interactive tools in six major categories (concepts and language, adverse childhood experiences, resilience, epigenetics, literacy, tools for practice)
College of Family Physicians of Canada	• *Rourke Baby Record* (2014) – evidence-based health supervision guide for physicians and health care providers caring for children in the first five years of life. • *Promoting optimal monitoring of child growth in Canada: Using the new WHO growth charts* (2010) – a practice guideline for health professionals in the promotion of consistent practices in monitoring growth and assessing patterns of linear growth and weight in infants, children and adolescents to support healthy child growth and development.

Canadian Paediatric Society (CPS)	• *Early Childhood Development* - online course • *Greig Health Record* (2016) – an evidence-based health promotion guide for clinicians caring for children and adolescents aged 6 -17 years.

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